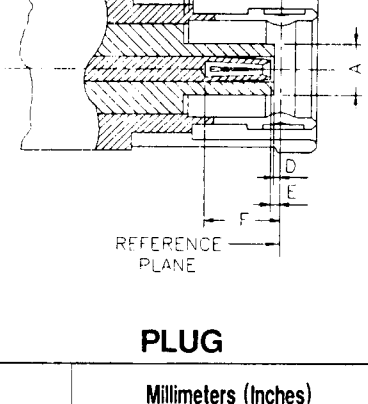
50 ohm 0-4 GHz

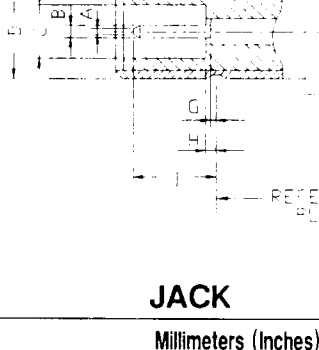
SMB connectors are semi-precision, subminiature devices that provide repeatable electrical perfor
SMB family of connectors provide a means of quick-connect and disconnect through a snap-on type c

Its smaller physical size and snap-on coupling make the SMB an ideal general purpose connector wh
ease of mating/unmating and economy are prerequisites. Crimp, clamp and receptacle types are
printed circuit board and straight body styles.

Typical applications for SMB connectors are telecommunications, test equipment, instrumentation ar

Interface Dimensions:





PLUG

Letter	Millimeters (Inches)	
	Minimum	Maximum
A	2.01 (.079)	2.06 (.081)
B	3.58 (.141)	3.78 (.149)
C	3.58 (.141)	—
D	0.27 (.0105)	0.52 (.0205)
E	0.29 (.0115)	0.57 (.0225)

JACK

Letter	Millimeters (Inches)	
	Minimum	Maxi
A	—	0.25 (.
B	0.48 (.019)	0.53 (.
C	2.08 (.082)	2.16 (.
D	3.66 (.144)	3.71 (.
E	0.04 (.0015)	0.24 (.
F	3.33 (.131)	3.53 (.
G	0.04 (.0015)	0.18 (.
H	—	0.18 (.

lectrical:

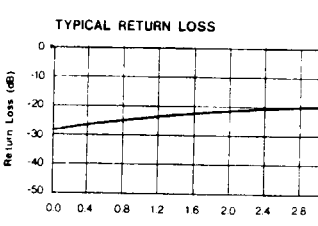
Impedance	50 ohm
Frequency Range	0 to 4.0 GHz
VSWR	1.25+0.04 X f GHz max (straight) 1.30+0.04 X f GHz max (right angle) • RG-174,188,316 → 1.25+0.04 X f GHz max (straight) 1.3+0.04 X f GHz max (right angle) • RG-178,196 → 1.3+0.04 X f GHz max (straight) 1.4+0.06 X f GHz max (right angle)
Voltage Rating	• RG-174,188,316 → 335 volts rms max • RG-178,196 → 250 volts rms max
Dielectric Withstanding Voltage	• RG-174,188,316 → 750 volts rms max • RG-178,196 → 500 volts rms max
Contact Resistance	center contact=6.0 Milliohms max outer contact= 1.0 Milliohms max
RF Leakage	-55 dB min @3 GHz
Insertion Loss	.4 dB max (straight) .6 dB max (right angle)
Insulation Resistance	1,000 Megohms min

echanical & Environmental:

Mating	Snap-on coupling
Durability	500 matings
Coupling Nut Retention	40 lbs min
Cable Retention	RG-174,188,316 → 20 lbs min RG-178,196 → 6 lbs min
Temperature Range	-65 ℃ to 165 ℃
Vibration	MIL-STD-202 Method 204 Test Cond. B.
Salt Spray	MIL-STD-202 Method 101 Test Cond. B.
Temperature Cycling	MIL-STD-1344 Method 1003 Test Cond. A.

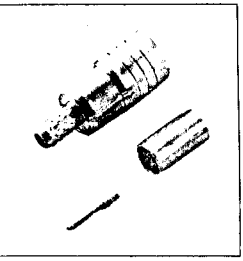
aterial:

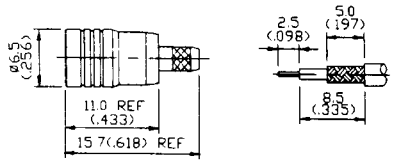
	Material	Plating
Connector Body	Brass	Nickel or Gold
Center Contact	Male:Brass Female:Beryllium Copper	30μ" gold over 100μ" nickel 30μ" gold over 100μ" nickel
Insulation	Teflon	None
Gasket	Silicone Rubber	None
Crimp Ferrule	Annealed Copper	Same as Body



Flexible Cable-Crimp Attachment

Straight Plug Crimp

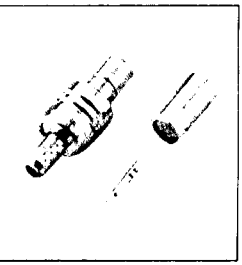


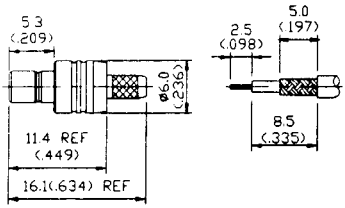


PART NO.	APPLIC/ CABLE
24-05L-1-TGG	174,188/
24-05M-1-TGG	178,1

- Finish:gold plated center conta
- Insulation:Teflon
- Refer to recommended assem

Straight Jack Crimp

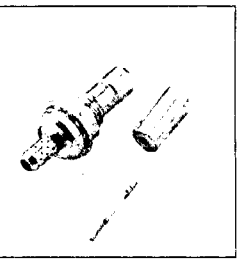


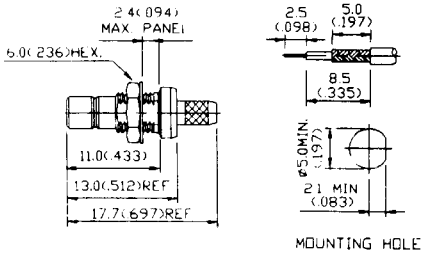


PART NO.	APPLIC/ CABLE
24-06L-1-TGG	174,188/
24-06M-1-TGG	178,1

- Finish:gold plated center conta
- Insulation:Teflon
- Refer to recommended assemb

Straight Bulkhead Jack Crimp

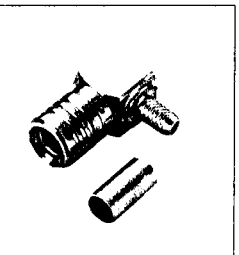


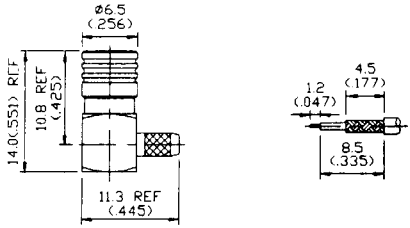


PART NO.	APPLIC/ CABLE
24-07L-1-TGG	174,188/
24-07M-1-TGG	178,1

- Finish:gold plated center conta
- Insulation:Teflon
- Refer to recommended assemb

Right Angle Plug Crimp



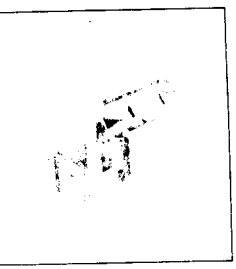


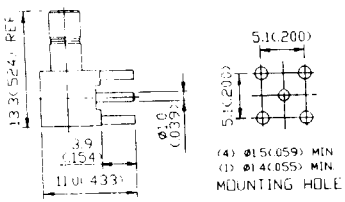
PART NO.	APPLIC/ CABLE
24-08L-1-TGG	174,188/
24-08M-1-TGG	178,1

- Finish:gold plated center conta
- Insulation:Teflon
- Refer to recommended assemb

Printed Circuit Board Receptacles

ight Angle PCB Mount Jack Receptacle

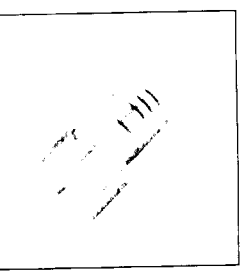


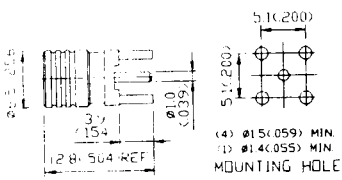


* **PART NO:24-12-2-T**

- Finish:gold plated center contac
- Insulation:Teflon

PCB Mount Plug Receptacle

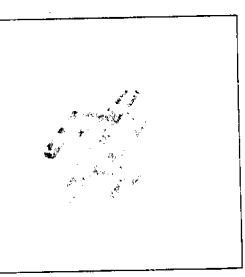


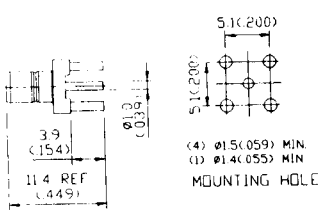


PART NO:24-13-1-T

- Finish:gold plated center conta
- Insulation:Teflon

PCB Mount Jack Receptacle





* **PART NO:24-14-2-**

- Finish:gold plated center conta
- Insulation:Teflon

Notes: 1. Nickel plated body availaolc, change the part no. suffix from TG**G** to TG**N**